



Compost Works: Turf Maintenance

Compost Works

The City of Waukee used compost to solve turf maintenance and establishment problems in Centennial Park, a multi-use sports area with disc golf holes, baseball diamonds and a trail. Centennial Park needed better lighting and wiring to accommodate late baseball games and other events like the city fireworks show on the Fourth of July. During the lighting installation and the completion of a trail and sidewalk around the park, some of the ground directly around the bleachers and parking lot was disrupted and needed repair. Soil Tek, a private contractor, was hired to address the city's problem.

The Situation

- ◆ Disturbance and compaction caused by construction equipment
- ◆ Installation of new lighting system and paved trail

The Problems

- ◆ Inadequate turf establishment
- ◆ An increase in erosion and weed growth
- ◆ Less attractive park

The Answer

- ◆ Compost

Application

- ◆ Used the same techniques as a sod application
- ◆ Power rake or skid loader provided an even surface
- ◆ Used a one half-inch layer of Metro Waste Authority's Premium Turf Gold half-inch screened compost with traditional turf building grasses; applied near ball diamonds
- ◆ Iowa Department of Transportation's "Rural Roadside" seed mix (a minimum maintenance mix of 70 percent grasses and 30 percent flowers) applied to non-irrigated areas along a roadside trail and a parking lot

Results

- ◆ Improved the soil
- ◆ Provided prompt groundcover
- ◆ Decreased erosion and weed growth
- ◆ Improved the park's appearance
- ◆ In June 2003, did not achieve a full turf stand because of dry weather conditions
- ◆ In 2004, achieved a full stand in two weeks



Bleachers and parking area at Centennial Park



Trail area at Centennial Park one year after installation

“Our results were amazing in 2004. If the conditions are right, this is the perfect stuff.”

Brad Freeman, Waukee Public Works Department

Compost Works For:

Soil Incorporant

- Turf establishment
- Garden bed preparation
- Reclamation/remediation
- Nursery production
- Roadside vegetation

Surface Applied

- Garden bed mulch
- Erosion control media

Turf Topdressing

Manufactured Topsoil

Growing Media Component

- Container/potting substrates
- Landscape (e.g. rooftop, raised planters)
- Backfill mixes (tree and shrub plantings)
- Golf course (e.g. tee, green, divot mixes)

Physical Improvement

- Improves soil structure
- Moisture management

Chemical Balance

- Modifies and stabilizes pH
- Increases cation exchange capacity

Biological Impact

- Supplies nutrients and soil biota
- Suppresses plant diseases

Other Benefits

- Binds/degrades contaminants
- Binds nutrients

Project Date:
April 2004

Organization:
City of Waukee

Location:
Centennial Park

Application Method:
Blown 1.5" layer
of compost and seed

Contact:
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